AQUA CHEM DIVISION OF GROW GROUP, INC. 4000 DUPONT CIRCLE LOUISVILLE, KY 40207

Product: AQUA CHEM BALANCED FOR CLEAN SPAS

STABILIZED GRANULES
Internal ID: 10-867

MSDS No: GROW / 55410 Revision: 2/12/93 Date: March 14, 1988

National Paint and Coatings Association

Hazardous Material Identification System

HEALTH HAZARD	3 - Serious
FLAMMABILITY HAZARD	1 - Slight
REACTIVITY HAZARD	2 - Moderate
PERSONAL PROTECTION	I - Glasses, Gloves, Dust / Vapor Resp

SECTION I. MATERIAL IDENTIFICATION

Trade/Material Name: AQUA CHEM BALANCED FOR CLEAN SPAS STABILIZED GRANULES

Description: CHLORINATED ISOCYANURATE, DICHLOR DIHYDRATE

Other Designations: SODIUM DICHLOROISOCYANURATE DIHYDRATE, SODIUM

DICHLORO-S-TRIAZINETRIONE DIHYDRATE

CAS: 51580-86-0

Chemical Name: 1,3-DICHLORO-S-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE SODIUM SALT, DIHYDRATE

PACKAGE SIZES: 16 OZ. (1 LB.)

EPA REG NO: 7368-37

Manufacturer: EST NOS: 52270-GA-1(C), CONTRAPAC 58401-MO-1(S), STELLAR 42177-TX-1(Y), YORK Phone: AQUA CHEM: 1-800-438-3036

MEDICAL EMERGENCY, CALL

COLLECT:

1-303-623-5716, 24 HRS. TRANSPORTATION EMERGENCY:

1-800-424-9300,

CHEMTREC, 24 HRS.

DISTRIBUTED BY: GROW GROUP, INC. 2501 MALT AVENUE CITY OF COMMERCE, CA 90040

SECTION II. INGREDIENTS AND HAZARDS

Ingredient Name: CAS Number: Percent: Exposure Limits:

SODIUM DICHLORO-S-TRIZENTRIONE,

DIHYDRATE

51580-86-0

99%

OSHA PEL: NONE **ESTABLISHED** ACGIH TLV: NONE

ESTABLISHED

CHLORINE:

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INGREDIENTS AND HAZARDS continued from page 1

TLV: 0.5 PPM STEL: 1 PPM

INERTS

NA

1%

NONE ESTABLISHED

PRODUCT CONTAINS A MINIMUM 55% AVAILABLE CHLORINE.

DANGER! HIGHLY CORROSIVE CAUSES IRREVERSIBLE EYE DAMAGE

CAUSES BURNS TO SKIN

IRRITATING TO NOSE AND THROAT

MAY BE FATAL IF SWALLOWED CONTACT WITH WATER SLOWLY LIBERATES IRRITATING AND HAZARDOUS CHLORINE GASES

SECTION III. PHYSICAL DATA

Appearance & Odor: WHITE GRANULAR SOLID; CHLORINE ODOR

Boiling point: N/A

Vapor pressure: N/A
Water solubility (%): 25 G/100 G H₂₀
Vapor density (air-1): N/A

pH: 6.0 @1.0% CONC.

Evaporation rate: N/A Specific gravity (H2O-1): 0.9

Melting point: 240-250°C (DECO

MPOSES) * volatile by volume: N/A

DECOMPOSES AT 460 TO 480°F WITH LIBERATION OF HARMFUL GASSES

SECTION IV. FIRE AND EXPLOSION DATA

Flash Point (method): NA

NFPA Fire Hazard Symbol Codes: Flammability: 0 Health: 3 Reactivity: 1 Special: OXY

Extinguishing Media: THERMAL DECOMPOSITION CAN BE EXTINGUISHED BY FLOODING WITH COPIOUS QUANTITIES OF WATER OR BY ISOLATING THE DECOMPOSING MATERIAL AND ALLOWING IT TO BE CONSUMED.

Unusual fire or explosion hazards: NITROGEN TRICHLORIDE CAN BE GENERATED BY REACTION OF WATER WITH PRODUCT UNDER CERTAIN CONDITIONS OF ph, CONCENTRATION AND TEMPERATURE. THE REACTION OF WATER WITH THE PRODUCT GENERALLY DOES NOT PRESENT AN EXPLOSION HAZARD AS THE RATE OF NITROGEN TRICHLORIDE FORMATION IS VERY SLOW.

Special fire-fighting procedures: FIREFIGHTERS AND OTHERS SUBJECTED TO PRODUCTS OF DECOMPOSITION SHOULD WEAR FULL PROTECTIVE CLOTHING AND SELF-CONTAINED BREATHING APPARATUS. CHLORINE-CONTAINING GASES WITH TRACES OF PHOSGENE CAN BE LIBERATED AT TEMPERATURES IN EXCESS OF 400°F.

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SECTION V. REACTIVITY DATA

Material IS stable Hazardous polymerization CANNOT occur

Chemical incompatibilities: AVOID CONTACT WITH WATER. ALSO AVOID CONTACT WITH EASILY OXIDIZABLE ORGANIC MATERIAL; AMMONIA, UREA, OR SIMILAR NITROGEN-CONTAINING COMPOUNDS; INORGANIC REDUCING COMPOUNDS; CALCIUM HYPOCHLORITE; ALKALIS.

NEVER MIX WITH ANY OTHER POOL CHEMICALS.

Hazardous decomposition Products: CHLORINE-CONTAINING GASES CAN BE PRODUCED. TRACES OF PHOSGENE CAN BE LIBERATED AT HIGH TEMPERATURES >400°F.

SECTION VI. HEALTH HAZARD INFORMATION

This product IS NOT considered a SUSPECTED carcinggen by OSHA, IARC OR NTP

Target organs: EYES, SKIN, NOSE OR THROAT

First aid:

Eye contact: FLUSH WITH WATER FOR AT LEAST 15 MINUTES.

MEDICAL ATTENTION.

Skin contact: BRUSH OFF EXCESS DRY MATERIALS; FLUSH WITH WATER.

Inhalation: REMOVE TO FRESH AIR. IF IRRITATION PERSISTS SEEK

MEDICAL ATTENTION.

Ingestion: DRINK PROMPLY A LARGE QUANTITY OF WATER. DO NOT INDUCE

VOMITING. AVOID ALCOHOL. GET PROMPT MEDICAL ATTENTION.

CONTACT OF THIS MATERIAL WITH MOISTURE WILL PRODUCE CYANURIC ACID AND HAZARDOUS CHLORINE GAS AND HYPOCHLOROUS ACID.

NOTE TO PHYSICIAN: PROBABLE MUCUSAL DAMAGE MAY CONTRAINDICATE THE USE OF GASTRIC LAVAGE.

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SECTION VII. SPILL, LEAK AND DISPOSAL PROCEDURES

Spill / Leak procedures: CONTAIN SPILLED MATERIAL. KEEP DRY, DO NOT ALLOW WATER OR OTHER INCOMPATIBLE SUBSTANCES (SEE "REACTIVITY DATA") TO COME INTO CONTACT WITH THE SPILLED MATERIAL. KEEP OUT OF SEWERS, WATERSHEDS AND WATER SYSTEMS. FOLLOW ALL PROTECTIVE MEASURES INDICATED IN THE "SPECIAL PROTECTION INFORMATION" SECTION OF THIS DOCUMENT. SWEEP, SCOOP, OR VACUUM UP ALL SPILLED MATERIAL, CONTAMINATED SOIL, AND OTHER CONTAMINATED MATERIAL AND PLACE IN CLEAN, DRY CONTAINERS FOR DISPOSAL. COMPLETE CLEANUP ON A DRY BASIS.

Waste management / Disposal: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. AS CURRENTLY DEFINED IN FEDERAL RCRA REGULATIONS, SODIUM DICHLORO-S-TRIZENTRIONE, WHEN DISCARDED, IS A HAZARDOUS WASTE EXHIBITING THE CHARACTERISTICS OF REACTIVITY (D-003). SEE 40 CFR 261.23. ITS DISPOSAL, THEREFORE, IS REGULATED BY FEDERAL RCRA REGULATIONS. CONSULT YOUR ATTORNEY OR APPROPRIATE REGULATORY OFFICIALS FOR INFORMATION REGARDING ADDITIONAL STATE AND LOCAL WASTE DISPOSAL REQUIREMENTS DISPOSAL BY INCINERATION IN AN EPA APPROVED HAZARDOUS WASTE INCINERATOR IS RECOMMENDED.

THIS PRODUCT IS TOXIC TO FISH. DO NOT DISCHARGE INTO LAKES, STREAMS, PONDS OR PUBLIC WATERS UNLESS IN ACCORDANCE WITH NPDES PERMIT. FOR GUIDANCE CONTACT THE REGIONAL OFFICE OF THE EPA.

SECTION VIII. SPECIAL PROTECTION INFORMATION

Personal protective equipment:

Goggles: WEAR CHEMICAL SAFETY GOGGLES TO PREVENT EYE CONTACT. HAVE EYE BATHS IMMEDIATELY AVAILABLE WHERE EYE CONTACT CAN OCCUR.

Gloves: WEAR APPROPRIATE IMPERVIOUS GLOVES AND PROTECTIVE CLOTHING TO PREVENT SKIN CONTACT. LAUNDER CONTAMINATED CLOTHING AND CLEAN PROTECTIVE EQUIPMENT BEFORE REUSE. PROVIDE SAFETY SHOWERS AT ANY LOCATION WHERE SKIN CONTACT CAN OCCUR.

Respirator: USE NIOSH APPROVED EQUIPMENT WITH FULL FACEPIECE WHEN AIRBORNE EXPOSURE LIMITS ARE EXCEEDED. CONSULT RESPIRATOR MANUFACTURER TO DETERMINE APPROPRIATE TYPE EQUIPMENT FOR GIVEN APPLICATION.

Other: IF CLOTHING BECOMES CONTAMINATED WITH THIS MATERIAL, REMOVE AND LAUNDER BEFORE REUSE.

Workplace considerations:

Ventilation: PROVIDE VENTILATION TO CONTROL EXPOSURE LEVELS BELOW AIRBORNE EXPOSURE LIMITS. LOCAL EXHAUST VENTILATION PREFERRED.

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SECTION IX. SPECIAL PRECAUTIONS

Storage segregation: STORE IN WELL VENTILATED AREA AWAY FROM SUNLIGHT AND HEATING DEVICES.

DO NOT STORE ADJACENT TO LIQUID CORROSIVE POOL CHEMICALS (ACID OR LIQUID CHLORINIZOR) OR TO CALCIUM HYPOCHLORITE (DRY SHOCK CHLORINIZOR). THESE COMBINATIONS SHOULD BE PROPERLY SEGREGATED.

Other precautions: AVOID CONTAMINATION WITH DIRT OR WITH OTHER CHEMICALS.

UFC OR NFPA: OXIDIZER, CLASS I

DOT Class: NOT REGULATED AS A HAZARDOUS UN Register: NOT APPLICABLE

MATERIAL, SEE SPECIAL PROVISION #28 IN 49CFR, PAR.

172.102.

Prepared/revised by: Donald L. Green

February 12, 1993

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.